

From: DeMaria, Eva
To: poulsen.mike@deq.state.or.us
Cc: "MCCLINCY Matt"; ROMERO Mike; LARSEN Henning; Sheldrake, Sean; Grandinetti, Cami; Zhen, Davis; Matheny, Don; Blischke, Eric; Michael Allen (allenmc@cdmsmith.com); "Coffey, Scott"
Subject: FW: TPH diesel: Source Control PRG Clarification
Date: Thursday, October 20, 2016 9:32:00 AM

Hey Mike-

I'd recommend you talk with EPA's chemist, Don Matheny (206-553-2599 and cc'ed on this). He explained things to me, but I can't spit it out like he does. After all, I was able to skip my organic chem lab final because of chicken pox. Ha! But I'll try here. It sounds like the labs are using EPA standard methods, it's a question of cleaning up the sample and calibrating the instruments. He also said that we are looking for the true carbon, not equivalent carbon, but that it reports out as equivalent carbon (I'm a little lost there). I also asked about the difficulty in getting down to the PRG for dioxin/furans and PCBs. He said that it shouldn't be too difficult for PCBs, but difficult for dioxin/furans. In the end, the PRPs/labs needs to attempt to get to a PQL below the PRG, but if they can't then they need to provide an explanation. You might be able to find more info here: <https://www.epa.gov/clp>. However, Don's a great resource and he can correct me if I got any of my elementary explanation above wrong. Thanks.

Eva

Eva DeMaria

Office of Environmental Cleanup | Superfund Site Cleanup Unit #2
U.S. EPA Region 10 | 1200 Sixth Avenue, Ste. 900, ECL-122 | Seattle, WA 98101
P: 206-553-1970 | demaria.eva@epa.gov

From: Matheny, Don
Sent: Wednesday, October 19, 2016 4:11 PM
To: DeMaria, Eva <DeMaria.Eva@epa.gov>
Subject: RE: TPH diesel: Source Control PRG Clarification

Eva,

The method in question would be the State of Washington EPH (extractable petroleum hydrocarbon) method which along with the NWTPH-Gx, Dx and VPH methods has been in use for quite some time and there are several environmental labs accredited for this analysis. The EPH method does define the C10-C12 aliphatic hydrocarbons on their chromatographic placement as compounds eluting from n-decane (C10) through n-dodecane (C12) where C10 and C12 are specifically calibrated on the instrument. As far as achieving a lower reporting limit, this would involve adjusting the GC conditions that would accommodate a lower calibration range and/or extracting a greater sample volume. What complicates this matter is the presence of interfering substances in the sample matrix that show up on the instrument and/or inhibit solvent extraction.

Would EPA be doing this analysis or the PRPs?

Don Matheny

USEPA Region 10- Chemist/CLP COR/RSCC

1200 Sixth Ave Suite 900, OERA-140, Seattle, WA 98101

matheny.don@epa.gov, (206)553-2599